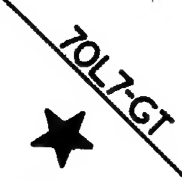




70L7-GT

RECTIFIER–BEAM POWER AMPLIFIER

Heater■	Coated Unipotential Cathodes			
Voltage	70		a-c or d-c volts	
Current	0.15		amp.	
Maximum Overall Length			3-7/16"	←
Maximum Seated Height			2-7/8"	←
Maximum Diameter			1-5/16"	
Bulb			T-9	
Base			Intermed. Sh. Octal 8-Pin	
Pin 1 – Rectifier Cath.			Pin 5 – Amplifier Grid	
Pin 2 – Heater			Pin 6 – Amplifier Cath.	
Pin 3 – Amplifier Plate			Pin 7 – Heater	
Pin 4 – Amplifier Screen			Pin 8 – Rectifier Plate	
Mounting Position	BOTTOM VIEW (8AA)		Any	

AMPLIFIER UNIT

Plate Voltage	117	max.	volts	←
Screen Voltage	117	max.	volts	←
Plate Dissipation	5.0	max.	watts	←
Screen Dissipation	1.0	max.	watt	←
Typical Operation and Characteristics – Class A_1 Amplifier:				←
Plate	110		volts	
Screen	110		volts	
Grid*	-7.5		volts	
Peak A-F Grid Voltage	7.5		volts	
Zero-Signal Plate Cur.	40		ma.	
Max.-Signal Plate Cur.	43		ma.	
Zero-Signal Screen Cur.	3	approx.	ma.	
Max.-Signal Screen Cur.	6	approx.	ma.	
Plate Resistance	15000		ohms	
Transconductance	7500		μmhos	
Load Resistance	2000		ohms	
Total Harmonic Distortion	10		%	
Max.-Signal Power Output	1.8		watts	

RECTIFIER UNIT

Peak Inverse Voltage	350	max.	volts	←
Peak Plate Current	420	max.	ma.	←
D-C Heater-Cathode Potential	175	max.	volts	←
With Condenser-Input Filter:				
A-C Plate Voltage (RMS)	117	max.	volts	
Total Effective Plate-Supply Impedance▲	15	min.	ohms	←
D-C Output Current	70	max.	ma.	

■ It is recommended that the potential difference between heater and cathode of the amplifier unit be kept as low as possible by connecting pin #2 to the side of the line opposite that to which pins #7 & #8 are connected.

* The type of input coupling used should not introduce too much resistance in the grid circuit. Transformer- or impedance-coupling devices are recommended. When the grid circuit has a resistance not higher than 0.1 megohm, fixed bias may be used; for higher values, cathode bias is required. With cathode bias, the grid circuit may have a resistance not higher than 0.5 megohm.

▲ When a filter-input condenser larger than 40 μf is used, it may be necessary to use more plate-supply impedance than the minimum value shown to limit the peak plate current to the rated value.

← Indicates a change.

RCA RADIOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

70L7-GT



70L7-GT

AVERAGE PLATE CHARACTERISTICS
AMPLIFIER UNIT

E_f = 70 VOLTS   SCREEN VOLTS = 110

CONTROL-GRID VOLTS E_{c1} = 0
-2.5
-5.0
-7.5
-10.0
-12.5
-15.0

PLATE VOLTS
0 25 50 75 100 125 150 175 200

PLATE MILLIAMPERES
125 100 75 50 25 0

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